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ABSTRACT

A study attempted to determine (1) whether nontraining managers' future financial support for the training function varied based on the amount and kind of information contained in written evaluation reports and (2) the deeper logic and behavior that nontraining managers used in making their decision. The research used a quasi-experimental design to identify the quantitative differences among the responses to four sample reports, which contained varying amounts and kinds of information. Each of the report types was reviewed by two persons in each of five organizations in Minneapolis. The investigator also conducted interviews with some of the decision makers to gather descriptive information about the processes they used in making these decisions. The study showed that the evaluation report was not a key factor in the allocation decision for most decision makers. Only half of the decision makers even looked at the evaluation report before determining the amounts of their budgets. The decision makers who did examine the evaluation reports either did not use the information, used the information to identify what had been wrong with the training program, or did not believe part of the information. However, there was some relationship between report type, organizational affiliation, and the level of financial support, with most decision makers preferring the format of the analytical evaluation report. The study concluded that training managers should try to supply managers with evaluation data they can use in order to increase training budgets. (KC)

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TRAINING AND DEVELOPMENT RESEARCH CENTER

Project Number Twenty-One

THE RELATIONSHIP BETWEEN TYPES OF EVALUATION REPORTS AND
SUPPORT FOR THE TRAINING FUNCTION BY CORPORATE MANAGERS

Catherine M. Sleezer
June 1987

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CHAPTER 1

Introduction

Reporting evaluation results is important to the training profession because it is a means for communicating the training function's contributions to the organization. This, in turn, is generally believed to lead to management support.

Lack of management support of training is a common complaint of training professionals (Dobbs, 1980) who simultaneously exhibit minimal attention to evaluation reporting (Parker, 1984). At least from the literature it appears as though trainers have not seriously thought about the role of reporting evaluation results to management or about connecting reports to managerial support.

Reports are intended to be decision-making tools (Parker, 1984). Willmotte and Morgan (1984, p. 21) wrote that "Two key groups generally dominate major organizational decisions—top-level decision makers and supporting professional staff."

Study Purpose and Overview

The purposes of this study were (1) to determine whether nontraining managers' future financial support for the training function varied based on the amount and kind of information contained in written evaluation reports and (2) to determine the deeper logic and behavior that nontraining managers used in making their decisions.

This research utilized a quasi-experimental design to identify the quantitative differences among the responses to four example reports. The reports contained varying amounts and kinds of information. The

investigator also conducted interviews with some of the decision makers to gather descriptive information about the processes they used in making these decisions.

The significance of this study rests with increased knowledge about the kind and amount of evaluation information that earns support for the training function. The results can be used by training professionals to present information to management in the most advantageous format.

CHAPTER 2

Review of Related Research

A review of training literature revealed two general evaluation themes. One theme focused on the value of evaluating and reporting the information. The other theme centered on current training practices.

Reporting Training Evaluation

Articles in Peterson's (1985) annotated bibliography on training literature highlighted the themes. For example, Eckenboy (1983) described periodic evaluation as a vital part of any organization's training effort. Kelley, Orgel, and Baer (1984) noted that "evaluation of training programs is critical to the economic survival of training departments and, ultimately to that of their organizations." Carlisle (1984) stated that "an efficient evaluation system is the most powerful way to improve training." And he further stated that:

It (evaluation) can ensure that instruction is well-conducted, that a program's content is correct, that trained skills transfer to the work place, that the money the company spends on training produces measurable improvements in effectiveness, efficiency or safety—in short that training is worth the trouble. (p.37)

And yet, Dopyera and Pitone (1983) noted that the absence of effective control systems in human resource development is common. Putman (1980) compared evaluation to losing weight in that everybody knows that it is important, but it is seldom done except under duress.

Many authors have addressed the issue of what should be measured. Much of their writing centered around the four levels of evaluation described by Kirkpatrick (1975)—reaction, learning, behavior, and results (Cook, 1980; Putman, 1980; Dopyera & Pitone, 1983). Recent research has

shown that the "results evaluation" method received the greatest amount of support from management with progressively less support for behavior, learning, and reaction evaluations (Kusy, 1986).

Specific goals of evaluation were also identified in the literature. The goals included improving the training program; providing feedback to program planners, managers, and participants; and assessing employee skills (Brandenburg, 1982). Dopyera & Pitone (1983) noted that while there are a variety of purposes for doing evaluation, most fall into two categories—justification and determination. Justification evaluations generate back-up material for budget requests to maintain or increase department activities. Determination evaluations provide information useful for planning, monitoring, and improving training programs.

In a review of 72 articles regarding training evaluation from 1980 through 1983, Parker (1984) found that:

The general purpose of training and development evaluation which is at least implied in 90% of these articles is to provide information for decisions about continuation, expansion, or contraction of training. The summative evaluative objective in these articles seems to be to prove to those who hold the purse strings that the training function is worthwhile. (p. 5)

Reporting the results of the evaluation is a major component of evaluation. Westover (1983, p. 24) noted that "regardless of the quality of the evaluative work, it may not be utilized unless the information is successfully disseminated." And King and Roth (1981, p. 66) stated that "if management doesn't know it, then it's the same as not having done it, from management's perspective." However, less than one third of the articles reviewed by Parker (1984) referred to the reporting component of evaluation.

Characteristics of Reports

Reports can be broadly defined as orderly and objective communications of factual information which serve some business purpose (Lesikar, 1981; Murphy & Hildebrandt, 1984). Reports can be made in written or oral form. The key functions of reports are to provide information for solving a problem or to aid in the decision-making process (Himstreet & Baty, 1984; Lewis & Baker, 1978; Murphy & Hildebrandt, 1984; Menning & Wilkinson, 1963; Sigband & Bateman, 1985). Some authors note that a report may be written to persuade as well as to inform (Lannon, 1985; Gilsdorf, 1986). Grenough and Dixon (1982) also discussed the inclusion of conclusions and recommendations in the report as well as the evaluation findings.

The design of reports varies according to their function, condition of use, and the organization where they are used (Mills & Walter, 1978). While there was agreement in the literature on the general functions of reports, there was no universally accepted system for classifying reports. However, there were some similarities in identified categories.

A review of classification systems of report writing by Lesikar (1981) identified the following approaches used to categorize reports: subject matter, time, function, degree of formality, physical factors, writer-reader relationship, status of authorship, and miscellaneous report types.

When reports are classified according to subject matter, the categories vary according to the differences among report topics (i.e., accounting, finance, marketing, training). This classification system was

identified by Lewis and Baker (1978), Himstreet and Baty (1984), and Murphy and Hildebrandt (1984).

Reports can also be classified by the frequency of their use (i.e., daily, weekly, monthly, annually, or special reports (Lesikar, 1981; Himstreet & Baty, 1984; Murphy & Hildebrandt, 1984).

Reports classified functionally are categorized according to what they do. Some authors identified two categories in this classification: informational and analytical (Brown, 1955; Himstreet & Baty, 1984; Murphy & Hildebrandt, 1984). Informational reports present only facts. Brown (1955) noted that reports in this category serve as a record of data, and Himstreet and Baty (1984) noted that informational reports carry objective information from one area of business to another. Examples of informational reports include periodic reports, progress reports, sales reports, and annual reports. Analytical reports present facts, an analysis and interpretation of these facts, and conclusions. Analytical reports may also include recommendations. Lesikar (1981) and Lewis and Baker (1978) identified three categories in this classification. One category, informational reports, presents only facts; another category, examination reports, presents facts and analysis; and the third category, analytical reports, presents facts, analysis, and recommendations.

Another classification approach divides reports into the two categories of the long, or formal, report and the informal report. The categories in this classification are broad and are not distinct. The criteria for deciding whether to make a report long or short include the amount of information, the readers for whom the report is intended, how much weight the report should have, the finality of the judgment contained

in the report, and the time available for preparing it (Ulman & Gould, 1972).

Reports are also divided according to physical factors. Categories in this classification include memoranda, letter reports, short reports, and long reports.

One classification system distinguished reports according to the relationship between the reader and writer. Categories in this classification include administrative, professional, and independent reports. Administrative reports are written by those within a business to facilitate operations; professional reports are submitted to the organization by outside sources; and independent reports are written for no particular audience (Lesikar, 1981).

When reports are classified according to the status of authorship, the distinguishing factor is whether the author of the report is employed by a private institution or by a public institution or is self-employed.

The miscellaneous report classification includes specific report types that pertain to a particular field, industry, or business.

An additional classification system identified by Himstreet and Baty (1984) and Lewis and Baker (1978) focused on whether the report is sent vertically or laterally. The intended audience of a lateral report is a peer, while the intended audience of a vertical report is a superior.

Reports about Training

Many authors identified characteristics that writers should consider when writing training reports. Reports should be easy to understand and should show the value of training (Cook, 1980). In addition, they should have a catchy title (Vickers, 1982) and be timely (Smith, 1980; Anderson

et al, 1975). King and Roth (1981) noted that results reported in quantitative terms are generally more easily understood and accepted. They also suggested that reports be focused on results which are perceived by the next higher level of management as being valuable for reaching their goals. These reports will give the training department greater visibility.

No published research on the effects of reporting training evaluation using the various types of reports appeared in the literature at the time of this review. Specifically, there were no studies showing decision makers' responses to the kinds and amounts of information in the functional report categories (informational, examination and analytical) and to the no-evaluation information report.

CHAPTER 3

Research Questions and Hypotheses

Decision makers invest in training with the expectation that their investments will positively impact the financial bottom line (Salinger, 1981; Hailsap, 1987). Evaluation can be used to demonstrate the effectiveness of training programs. Morano (1975) points out that evaluation information can serve as the basis for next year's budgets and can justify budgets of previous years. A recent survey of 43 Fortune 500 industrial companies found that 18 companies justified management training courses based on whatever financial resources were required for planned courses. Nine companies justified training by evaluating the results of past training. Five, by using the previous year's levels of support for training. Three, by insuring a reasonable return on investing training dollars. One used a fixed percent of some figure, such as last year's profit or sales. And seven companies used other justifications such as needs identified and approved, or requesting funds for the programs that were demanded by top management (Clegg, 1987).

While the above describes what trainers do, nontraining managers have indicated that they are most likely to support training that is reported through a results-oriented approach (Kusy, 1986). Houp and Pearsall (1984) pointed out that because managers must often make decisions based on the information contained in reports, they are usually more interested in the implications of the data than they are in the actual data.

Hailsap (1987) noted that training is perceived by management as an investment and that the way to gain funding for programs is to demonstrate

that the programs have greater financial benefits than could be gained through other investments. He also encouraged training professionals to record the results of programs that have been funded. By reporting the progress of training in this way, they will "keep the pump primed for future interest in new training proposals." He concluded that the reports will focus management's attention on training as a way of achieving greater efficiency in the organization's endeavors.

In summary, the cited literature and research supported the use of training program evaluations as a means for gaining future support for the training function. It also supported the inclusion of "analysis information" and "implications" in reports to decision makers. The literature review provided the basis for the following research questions and hypotheses.

Research Question #1: What is the relative effect of types of evaluation reports on the financial support given to training by nontraining managers?

Ho₁: There is no significant difference in financial support of the training function by nontraining managers based on report types consisting of informational, examination, and analytical, and no-evaluation information.

Research Question #2: Is there a relationship between organizational affiliation of the decision maker and the level of financial support?

Ho₂: There is no correlation between financial support of the training function by nontraining managers and organizational affiliation.

Research Question #3: What is the deeper logic and behavior used by nontraining managers in making decisions about the level of financial support they will give to training?

CHAPTER 4

Method

While the primary focus of the research was to determine the effect of report type on the amount of financial support for training, the investigator was aware that organizational considerations might also influence budget amounts. A randomized blocked design was prepared with two subjects from each organization being assigned randomly to each report type. The four report types were (1) no-evaluation information, (2) informational, (3) examination, and (4) analytical. There were five organizations. The research design used in this study was the static-group comparison which is classified as a pre-experimental design by Campbell and Stanley (1963).

The investigator also conducted interviews with the subjects to gather descriptive information about the deeper logic and behavior subjects used in making their decisions.

Definition of terms

The independent variable in this study is the kind and amount of information contained in written evaluation reports. This research is based on the functional classification plan identified by Lesikar (1981) and Lewis and Baker (1978) which contains three categories of reports: informational, examination, and analytical.

The informational report presents only facts, without analysis or conclusions. Analysis is the breaking up of a whole into its parts to find out about their functions, natures, proportions, or relationships. Conclusions are judgments or decisions reached after deliberation.

The examination report contains facts about the problem plus analysis and interpretation of the data.

The analytical report presents conclusions about the problem, as well as facts about the problem, and analysis and interpretation of the data. Analytical reports may also contain recommendations.

In addition to the three categories identified by Lesikar and Lewis and Baker, a no-evaluation information report was also used. The report that contains no-evaluation information does not provide any information about the training evaluation. Instead, it indicates that training has been completed and that the training department is pleased to have been of service.

The managerial situation describes a set of circumstances about a manufacturing department.

The dependent variable in this study is the amount of financial support for the training function. Financial support is the amount of funding allocated to the training department for performing its service to the organization.

Training manager is the individual who has direct responsibility for the training function in an organization.

Decision maker refers to an individual who has decision making responsibility for the allocation of resources for training programs.

Subjects

The criteria for determining an organization's participation in the research was that the organization had a training department, that it had more than eight people with decision-making responsibility for the

allocation of resources for training programs, and that it was willing to participate in the study.

Potential organizations were identified through several methods including knowing a contact person in the organization and selection from organizations listed in the yellow pages of the Minneapolis phone book. The investigator contacted each identified organization to determine if the organization could and would participate in the study.

In each of the identified organizations, the person responsible for training produced a list of potential decision makers. Eight decision makers were then randomly selected from the list by the investigator. The process used in this selection was to number each of the names and use a random number table to pick the subjects. Each subject was contacted by either the investigator or the person responsible for the training function. Each subject was invited to participate in the research. If a subject declined to participate, a replacement was randomly chosen from that organization and invited to participate. In each of the five organizations each of the report types was reviewed by two persons. This resulted in 40 responses (five organizations times eight reviewers).

Ten decision makers were selected to be interviewed for purposes of obtaining descriptive information about the deeper logic and behavior the subjects used in making their decisions. A table was constructed to assure approximately equal representation of all report types and all organizations in the group of subjects selected for interviews (see Table 1). From within each designated cell, the investigator selected one subject by the flip of a coin. Each of the individuals selected was contacted to request the interview.

TABLE 1

Assignment of Interviews by Organization and Report Type

		REPORT TYPE			
		1	2	3	4
O R G A N I Z A T I O N	1	X			X
	2			X	X
	3		X	X	
	4		X		X
	5	X		X	

Report Types: 1 - No-evaluation
 2 - Informational
 3 - Examination
 4 - Analytical

X in box indicates organization and report type selected

Instrument

The level of the decision makers' support for the training function was assessed using the Managerial Situation and examples of the four types of reports. The Managerial Situation described a hypothetical set of circumstances about a manufacturing department, including data about a training program that had been purchased and information about future training needs.

A hypothetical report that was attached to the Managerial Situation was the manipulated independent variable. There were four types of reports.

One of the reports was a memo stating that training for 61 operators had occurred. It did not contain any evaluation information. The remaining three reports each exemplified one of the three functional categories of reports—informational, examination, and analytical (Lesikar, 1981; Lewis and Baker, 1978). The informational report contained only the facts, without analysis or conclusions. The examination report contained the facts about the problem as well as analysis and interpretation of the data. The analytical report contained facts about the problem, analysis and interpretation of the data, plus conclusions and recommendations. Based on the information provided in the Managerial Situation and the attached evaluation report, the decision maker was asked to determine the following year's training budget. The Managerial Situation and the four reports are contained in Appendix A.

Before the research was conducted, the first draft of the Managerial Situation and reports were validated (see Appendix B).

The face validity of the Managerial Situation and the reports was determined by the expert judgment of six nontraining managers and three training experts. In addition to determining the validity of the instrument, the experts also pilot-tested the instrument.

Each expert independently reviewed the instrument. At the completion of each review, the investigator explained the purpose of the research and asked if the problem addressed by the study was significant, if the study adequately addressed the problem, and if there were any suggestions for improving the Managerial Situation or the evaluation reports.

The investigator revised the Managerial Situation and the evaluation reports to incorporate the experts' relevant suggestions (see Appendix A).

Two communication experts established the face validity of the reports in relation to the functional classification model. That is, three of the training reports were examples of the functional report categories, and the remaining report did not contain evaluation information about the training program.

Reliability of the instrument was assessed by using the test-retest method. Forty-six graduate students enrolled in the University of Minnesota's Training in Business and Industry course reviewed the Managerial Situation with an attached evaluation report and determined a budget at the beginning of a class session. After one and one half hours of intensive classroom work on other subject matter, each of the forty-six students reviewed the Managerial Situation and the same report and determined a budget. Eleven comparisons between the first and second administration of the instrument were made for the no-evaluation information report and for the examination report. Twelve comparisons were made for the informational report and for the analytical report. A paired samples T Test of all forty-six students' allocations was made to determine the correlation between the amounts budgeted for the two administrations of the instrument.

Research Procedure

Each of the decision makers who agreed to participate in the research received a packet that contained a cover letter, the Managerial Situation, an evaluation report, and a stamped return envelope. The cover letter explained the importance of the research and the decision maker's role and requested that the decision maker return the completed Managerial Situation in the enclosed envelope by a specific date. This date was two

weeks after the date the packet would be received by the subject. The stamped return envelope was addressed to the investigator at the University of Minnesota Training and Development Research Center. Appendix C contains the cover letter.

The raw quantitative data for this study consisted of the amounts that each decision maker indicated would be budgeted for training next year. This raw data was tabulated by report type and organization. The data was then analyzed using SPSS/PC+ procedures ANOVA and ONEWAY (Norusis, 1986). For both null hypotheses, the alpha level was set at .05.

The interviews consisted of both structured and unstructured questions. The structured questions asked in the interview were:

- 1) What was the basis for your budget decision?
- 2) What training programs have you budgeted for?
- 3) Was the evaluation useful in making the decision?
- 4) Do you have any suggestions for improving the analytical report?
- 5) What kinds of information are necessary prerequisites for making training budget decisions?
- 6) What kinds of training evaluations have you received in the last year?

The methods used in gathering the qualitative data included observation and interview. The steps taken to assure the accuracy and confidentiality of the data included coding each managerial situation before it was mailed. A three-digit code placed in the upper-right-hand corner identified the organization (1-5), the person (1-8), and the report (1-4). The subject mailed the completed Managerial Situation directly to the investigator. To assure the accuracy of the qualitative information, the investigator verified her perceptions with the subject during the interview and typed the interview notes as soon as possible after the

interview. To assure confidentiality the investigator chose the interviewees. The organization did not have knowledge of the identities of those chosen to be interviewed.

CHAPTER 5

Results

This section includes results obtained from the validation of the instrument; the determination of the reliability of the instrument; the identification of participating organizations; the selection of subjects; the collection of data; and the analysis of the data.

Validation of the Instrument

The face validity of the first draft of the Managerial Situation and the reports (Appendix B) was established by three training experts and six nontraining managers. Appendix D lists the names and organizations of the nine individuals.

Each of the six nontraining managers and three training experts established the face validity of the instrument, the significance of the problem addressed by the study, and the adequacy of the study for addressing the problem. They suggested several changes in the Managerial Situation and reports. These included the addition of a training program option, changing "installation of new machinery in the department" to "retrofitting old machinery" and clearly labeling the training options. The inclusion of an additional training program option offered decision makers another budget choice. The change from new machinery to retrofitted machinery was suggested by two nontraining managers. They noted that, in their operation, the decision to install new machines in an area virtually mandated the manager to train employees on those machines. The high cost of new machinery means that a manager must take all steps to

ensure its effective use. Training is generally a small cost when compared to the cost of the machines and to the expected benefit from effective use of the machines. Politically, the manager had to train operators, regardless of company profits, department budget, or credibility of the source of the training. Several nontraining managers indicated that the reference in the situation to the CEO's need to hold the line on costs would direct managers in their organizations not to exceed the previous budget regardless of the benefit.

The nontraining managers also indicated that being asked to circle a choice limited their budget options. They also said they did not need to be told that the evaluation report was attached because they could see the staple. One nontraining manager indicated that receiving a report which addressed two training needs would be confusing. The Managerial Situation was revised to incorporate these suggestions (see Appendix A).

The two communication experts then established the validity of the revised reports—that three of the reports were examples of the functional classification model and that the fourth report did not contain evaluation information about the training program (see Appendix D).

Reliability of the Managerial Situation and the Evaluation Reports

The test-retest reliability of the Managerial Situation was determined by comparing the budgets allocated by the students in the first administration with budgets allocated in the second administration. Table 2 contains the reliability data.

TABLE 2

Reliability: Simple Correlation First and Second Administration

N = 46								
	No-evaluation Report		Informational Report		Examination Report		Analytical Report	
	first	second	first	second	first	second	first	second
1	17,500	17,500	17,250	17,250	27,250	40,000	17,250	17,250
2	10,000	10,000	36,000	36,000	16,500	18,000	33,750	33,750
3	16,500	16,500	25,000	25,000	34,000	34,000	17,250	17,250
4	33,750	33,750	33,750	33,750	33,750	33,750	35,000	16,500
5	10,000	14,920	17,500	17,500	17,250	17,250	43,750	43,750
6	33,750	16,500	33,750	33,750	43,750	43,750	16,500	33,750
7	15,000	15,000	33,750	16,500	25,000	25,000	33,750	33,750
8	16,500	16,500	43,750	43,750	30,000	30,000	17,250	17,250
9	16,500	16,500	33,750	33,750	15,000	15,000	16,500	17,250
10	43,750	43,750	17,250	17,250	26,500	26,500	0	0
11	43,750	43,750	43,750	33,750	17,250	43,750	34,000	40,000
12	—	—	33,750	16,500	—	—	43,750	33,750
n = 11		n = 12		n = 11		n = 12		
8 identical		8 identical		8 identical		7 identical		
2 higher		0 higher		3 higher		3 higher		
1 lower		4 lower		0 lower		2 lower		

The SPSS/PC+ procedure T-TEST for paired-samples (Norusis, 1986) was used to compare the first and second administration of the test. The correlation between administrations for the 46 subjects was $r = .77$, ($p < .001$).

Identification of Participating Organizations

The investigator initially identified 18 organizations large enough to have more than eight individuals with responsibility for the implementation of training programs.

In five of the contacts, the organizations had a training department, more than eight people with decision-making responsibility for implementing training programs, and a willingness to participate in the study. These five organizations participated in the research. Two of the organizations were in health care, two were in manufacturing, and one was a financial institution.

Thirteen organizations were either unable or unwilling to participate in the study. Table 3 identifies each of the 13 organizations according to their industry and their reasons for not participating in the research. The investigator contacted three training departments in organization 5. All three declined to participate.

The first seven training departments listed on Table 3 were situations where the managers who used training did not make financial decisions about training.

- o In organizations 1, 2, 3, 4, 6, and 7A, upper management made decisions about funding training and about the kinds of programs that were offered, and the cost of training charged back to the users.

- o In organization 5 the training manager made all the decisions about the training that was offered, and upper management approved the budget.

- o The training manager in organization 7B was not willing to participate in the research. He was concerned that management would learn of the availability of tools for evaluating training programs. He noted

"We get the money for the programs we really need, and so [we] don't want decision makers to know about cost benefit analysis or we'll have to do that, too. [We] don't want decision makers to even think about cost benefit analysis."

TABLE 3

Organizations That Did Not Participate in the Research

Kind of Organization	Reasons	Training not charged back to the users	No training department	Didn't want decision makers to think about evaluation methods	Lack time
1. Insurance		X			
2. Retail Sales		X			
3. Manufacturing		X			
4. Services		X			
5. Health Care		X			
6. Manufacturing		X			
7. Manufacturing Dept A		X			
Dept B				X	
Dept C				X	
8. Manufacturing				X	
9. Distribution				X	
10. Finance			X		
11. Health Care			X		
12. Manufacturing					X
13. Manufacturing					X

o The training manager of organization 7C also declined to participate in the research because he did not want decision makers to think of cost benefit analysis as a tool for evaluating training programs.

He felt that nobody did cost benefit analyses well. He was especially concerned that nobody had been able to separate the specific factors that affected an outcome. He noted that "Cost benefit analysis is on the cutting edge. And I don't want to be on the cutting edge. It's too sharp!"

- o The Human Resources Manager in organization 8 was unwilling to participate because his organization had merged in the previous year and he did not want any managers thinking about the evaluation of training programs.

- o Organization 9 was unwilling to participate because the training manager had her own method of evaluating training and did not want her managers to know that there were other ways to evaluate.

- o In organization 10 there was no training department, very little structured training was done, and what was done was managed by the individual departments.

- o In organization 11, the Human Resource Manager indicated that the training department had been dissolved in the last six months, and it was not a good time to talk to anyone in the organization about training.

- o The training managers in organizations 12 and 13 were not willing to participate in the research because of their training departments' busy schedules.

Selection of Subjects

In each of the five organizations that participated in the research, the person responsible for training identified a group of potential subjects in that organization. Each potential subject had decision-making responsibility for the implementation of training. Table 4 shows the number of potential decision makers identified in each organization. Subjects were selected from this group by numbering each name and using a random-number table. Eight subjects were selected in each organization.

TABLE 4

Number of Potential Decision Makers in Participating Organizations

Organization #	Number of Potential Subjects
1	93
2	40
3	121
4	16
5	10

The potential subjects in organization 1 were directors, managers, and supervisors. The sampling frame consisted of 20 directors, 23 managers, and 50 supervisors. The potential subjects in organization 2 were the key upper-middle managers responsible for the manufacturing operations of the organization. In organization 3, the sampling frame included 13 administrators, 48 clinic managers, and 60 department managers. The potential subjects in organization 4 included the president of the organization, the executive vice president, 4 senior vice presidents, 8 vice presidents, and 2 assistant vice presidents. The potential subjects in organization 5 consisted of a cross section of managers from the service and support areas.

Each person was contacted by either the investigator or the person responsible for the training function and was asked to participate in the research. Of the 40 individuals contacted, one person declined to participate and one person agreed to participate but was unable to complete the exercise because she went on maternity leave. Replacements for both of these individuals were randomly chosen from the lists of potential subject in their organizations.

The subjects were employed in the fields of health care, manufacturing, and finance. The job titles of potential subjects ranged from supervisor to president. The job titles of subjects who actually participated in the research ranged from supervisor to senior vice-president.

Collecting Data

Each decision maker who agreed to participate in the research received a packet that contained a cover letter, the Managerial Situation, an evaluation report and a stamped return envelope. In each organization, two reports of each type were randomly assigned to the eight subjects.

All forty subjects completed the exercise. Thirty-four of the decision makers completed and returned the exercise within the requested time period. The six decision makers who had failed to return their exercises were contacted. Five of them indicated that their responses were in the mail. Subsequently, each of these responses was received. One decision maker indicated that she had mailed her response within a day after she had received it. It was determined that the response had probably been lost in the mail. The subject repeated the exercise using the same report type.

In addition to gathering the quantitative information, the investigator also interviewed two subjects from each organization to obtain qualitative information about the deeper logic and behavior in making decisions about financial support for the training function. The interviewees were chosen by the investigator. The two subjects who were reviewing the report type specified in Table 1 were identified and one was selected by flipping a coin. The individual was then contacted and interviewed. All of the selected subjects agreed to be interviewed. Each subject was interviewed using both structured and unstructured questions. To assure the accuracy of the information, the investigator verified her perceptions with the subject during the interview. Also, the interview notes were typed as soon as possible after the interview. The interview notes are contained in Appendix E.

Research Questions #1 and #2

The raw data was tabulated by report type and organization and was analyzed using the SPSS/PC+ procedures ANOVA and ONEWAY (Norusis, 1986). The raw data with budget by report type and organization are displayed in Table 5.

As shown in Table 6, the main effects for report type and organization (the blocking variable) were not significantly different at the .05 level. The significant two-way interaction between report type and organization ($p = .01$) limits the appropriateness of comparison tests by either report type or organization.

TABLE 5

Budget by Report Type and Organization

	No-evaluation Report		Informational Report		Examination Report		Analytical Report	
	1	2	3	4	5	6	7	8
O R G A N I Z A T I O N	1	2	3	4	5	6	7	8
G 1	43,750	16,500	10,000	10,000	21,000	33,750	33,750	33,750
A 2	43,750	43,750	14,400	26,500	15,000	16,500	14,400	33,750
I 3	16,500	16,500	26,500	43,700	26,500	17,250	33,750	43,750
A 4	16,500	25,000	16,500	14,400	16,500	26,500	16,500	15,000
I 5	33,750	43,750	43,750	33,750	17,250	16,500	16,500	33,750
O N								
Total	299,750		239,500		206,750		274,900	
Average	29,975		23,950		20,675		27,490	
	n = 10		n = 10		n = 10		n = 10	

TABLE 6

Analysis of Variance
Main Effects for Report Type and Organization

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	1111931125.00	7	158847303.57	2.456	.054
Report	496668250.00	3	165556083.33	2.560	.084
Block (organization)	615262875.00	4	153815718.75	2.379	.086
2-way Interactions	2510096125.00	12	209174677.08	3.235	.010
Report/Organization	2510096125.00	12	209174677.08	3.235	.010
Explained	3622027250.00	19	190633013.16	2.948	.010
Residual	1293322500.00	20	64666125.00		
Total	4915349750.00	39	126034608.97		

Research Question #3

The information gathered in the interviews was divided into two parts for analysis. The first part consisted of answers to the structured questions, and the second part contained information gathered from the non-structured questions. The structured questions asked in the interview were:

- 1) What was the basis for your budget decision?
- 2) What training programs have you budgeted for?
- 3) Was the evaluation useful in making the decision?
- 4) Do you have any suggestions for improving the analytical report?
- 5) What kinds of information are necessary prerequisites for making training budget decisions?
- 6) What kinds of training evaluations have you received in the last year?

The answers to interview question #3 were collected by observing the decision makers while they completed the exercise. The answers to the other five questions were gathered using the interview method. The answers to all six questions were synthesized using two-axis matrices. The data gathered from the unstructured questions was grouped by topic.

Table 7 shows each decision maker's responses to the first three questions. The table shows that the most frequently cited reason for allocating funds to training was a perceived critical need (nine of the ten decision makers cited this reason). Comments from the decision makers included, "After investing in machines, it would be foolish not to spend only ten percent more over last year's budget to train people in how to work them," and "In high technology industries, if you don't train you're dead. In other businesses, it wouldn't hurt the ability to compete if it took longer to get people up to speed. So the manager can take longer to

TABLE 7

The Basis for Original Budget Decisions, Funded Training Programs,
and Use of Evaluation Report in Decision Making

Decision maker	Basis for decisions					Funded training programs					Reviewed evaluation report
	perceived necessity of training	evaluation report information	organization profits	department budget	perceived ability to increase productivity	Emerson	FNS	Process Flow	Miscellaneous	Other	
A	X	X				X ¹	X ¹				Yes
B		X						X			Yes
C	X		X							X ²	No
D	X	X								X ²	Yes
E	X			X			X				No
F	X				X	X	X	X			No
G	X		X				X				Yes
H	X					X ¹	X ¹	X ¹			Yes
I	X		X			X	X				No
J	X		X		X		X		X		No

¹ The total cost of the program was not funded.

² The decision maker did not specify programs but instead budgeted a no-strings-attached lump sum for the training function.

get people up to speed." The company's profits and budget were also cited as important in determining the training allocation by four of the ten decision makers.

Only five of the ten decision makers looked at the evaluation report before making their decision. And the five decision makers who examined an evaluation report either did not use the information, used the information to identify what had been wrong with the previous training program or did not believe part of the information.

For example, one decision maker noted that the kind of evaluation situation presented in this research is only necessary if there are lots of training choices, or lots of choices between training and nontraining options. She noted, "If the internal training is rotten but the manager politically is expected to use the training, then the evaluation is unnecessary." She also stated that "If the training is necessary and it is only offered internally, then evaluation is unnecessary. If there is no choice, then the better option for the training department would be to keep the quality high, rather than spending time to evaluate to justify the training programs." (See notes from interview G.)

Another decision maker stated that managers evaluate before the fact and not after the fact. This decision maker believed that after-the-fact evaluation would not impact future decisions unless the programs were going to be duplicated and that evaluation is useful only for on-going training and repeat training. (See notes from interview J.)

Both decision makers who reviewed the informational report made negative comments about the evaluated training program (see notes from interviews B and D). Both of the decision makers noted that the evaluation

report identified two training needs and that the training program had, in their minds, addressed the wrong problem because it had improved quantity rather than quality.

The department budget was cited once and increasing productivity was cited twice as reasons for budget decisions.

The program that was most supported by the respondents was FNS training for the retrofitted machines (seven out of ten). Money was allocated for Emerson training three times, for process flow training three times, and for miscellaneous training one time. Table 7 also shows that in one organization the decision makers did not budget for specific training programs, but rather budgeted a no-strings-attached lump sum for the training function.

Table 8 shows the kind of additional information that each decision maker said was needed to determine the training budget in this situation. One of the decision makers said that there was sufficient information. Seven decision makers wanted additional information on the training courses offered; six wanted additional information about the Process Flow Course; three wanted information about the Emerson training; and one wanted information about the FNS training. The needs for additional information about the corporate goal, the values that are associated with the implications of the report, the department's contribution to the organization, and the need for training were each identified by one decision maker. One decision maker asked for more information about the previously conducted program.

TABLE 8

Additional Information Needed for Determining the Budget

Categories Decision Maker	Available Training Programs			Evaluated Program	Other			No Information Requested
	Process Flow	Emerson	FNS	Emerson Operator Training	Training Need	Corporate Goal	Value of Training to Productivity	
A	X	X						
B	X							
C								X
D				X				
E					X			
F	X						X	
G	X	X				X		
H		X	X					
I	X							
J	X						X	

Although nine decision makers indicated that they needed more information to make this budget decision, the investigator did not provide the requested information, and each of the decision makers determined a budget amount without it.

The investigator also asked the decision makers about the kinds of written evaluations they had received in the last year. Table 9 shows the decision makers' responses. Six of the decision makers had received no written evaluations. Trainee satisfaction reports were received by three decision makers; a supervisor satisfaction report was received by one decision maker. Learning information was reported to one decision maker and a memo-type report with employee certificates was received by one decision maker.

TABLE 9

Kinds of Written Training Evaluations Received by the
Decision Makers in the Last Year

Evaluation Type Decision Maker	None	Trainee Satis- faction	Super- visor Satis- faction	Learning Scores	Memo Type Report	Trainee Certificate
A	X					
B	X					
C	X					
D	X					
E					X	X
F		X	X			
G		X				
H		X		X		
I	X					
J	X					

The decision makers' suggestions for improving the analytical report are shown in Table 10. The decision makers' general reactions to the format of this report were positive. They thought it efficiently communicated the purpose of the report, the message, and the recommended follow-up action. While six of the decision makers had no suggestions, four of decision makers did have recommendations. Two suggested removing the cost benefit information, one suggested removing the satisfaction, learning, and performance information. One decision maker suggested including information about the kinds of questions asked in determining

TABLE 10

Decision Makers' Recommendations for Improving the Analytical Report

Suggestions Decision Maker	None	Remove satisfac- tion and learning info	Remove bost benefit info	Include satis- faction delivery questions	Signify impor- tance of effectiveness evaluation questions
A	X				
B	X				
C		X			
D	X				
E	X				
F				X	X
G			X		
H	X				
I	X				
J			X		

delivery effectiveness, and the implications of the percents used in measuring the effectiveness of training.

After the subjects had allocated a budget and answered the structured questions, the investigator explained the purpose of the research and showed the decision makers the other three reports. This information is labeled "discussion" in the interview notes (see Appendix J). The descriptions given by some subjects of the kind of information they wanted to receive in evaluation reports was not consistent with the information that they had actually used to determine the budget allocation.

Analysis of the information from nonstructured interview questions showed that cost benefit evaluation of training programs was a topic of interest to most of the decision makers. Eight of the ten decision makers commented on the cost benefit information contained in the analytical report. Three of the decision makers indicated that the cost benefit information was not useful, and five indicated that it was useful. However, the investigator noted that two of the five decision makers who considered the cost benefit information useful had not looked at the evaluation report before allocating the training budget.

The following comments were made by decision makers who thought that the cost benefit information was useful.

- The decision maker in interview E stated, "If I could show that training would pay back six-fold, I would budget the other \$10,000 for Process Flow training without floating the money." But later in the interview he wondered about the cost of doing a cost benefit analysis. He also stated that, "Hospitals work on a 2% to 3% margin and couldn't afford to triple the

training/education budget—no matter what the cost benefit analysis showed. The organization simply does not have the money to invest."

- Decision maker in interview F, "Cost benefit shows that the amount returned would cover the amount budgeted. With a little time, I could determine the cost benefit of other courses offered, and that they would save even more."
- The decision maker in interview D indicated that if he had had cost benefit information, the amount budgeted would have been doubled.
- The decision maker in interview H indicated that if he had had cost benefit information, he would have increased his allocation for training by \$9,000. He would increase his allocation because he would have already gotten full return on his previous budget.

The following comments were made by decision makers who did not find cost benefit analysis useful.

- The decision maker in interview C noted, "Cost benefit analysis doesn't matter in this case. It doesn't matter how good the training is because the manager is judged tomorrow on the short-term profitability. Long-term profitability for the company may be opposite of the short-term rewards."
- The decision maker in interview J stated, "Cost benefit evaluation for a program should not affect future decisions because each training situation must be evaluated on its own

merit. Payback on one program may not mean payback on another." And she continued, "Cost benefit is only an estimate. It can be fudged enough to make the payback look great. We do it with equipment and it can be done with training. Cost benefit doesn't stand alone."

- Decision maker in interview G asserted that cost benefit evaluation could not be done in her environment. And she stated, "In fact, I would laugh at training if they did a cost benefit analysis." But she then noted that her bosses had started asking for this kind of quantitative information. She was concerned with the difficulty of measuring the results of training, and the bias that could occur if training is responsible for evaluating its own programs.

Several decision makers mentioned the need to justify training programs. Decision makers in interviews G and H identified the methods they use to get the funds they need. The decision maker in interview G budgets training costs from two funds, and the decision maker in interview H typically requests four training programs with the expectation that three will be funded. Some of the decision makers checked to see that the amounts they had budgeted were in line with the organization budget.

The investigator noticed that some decision makers who reviewed the other three reports used the additional information to confirm their previous decisions. Comments from the decision makers indicated that because of expected budget constraints, they would not increase their training allocation beyond a certain point. In these situations, the

additional information did not increase the amount of financial support, but it did make the decision makers feel better about their decision.

Delimitations and Assumptions

This research focused on how the kind and amount of information contained in written evaluation reports effected the financial support of the training function by nontraining managers. While the success of a training department is dependent on a variety of different types of support, including political support, and the use of key resources, this research addressed only financial support. In addition, it focused only on the use of evaluation reports in justifying training programs.

This research examined the effects of one training program evaluation on the level of support for training. The effects of routine reporting of evaluation information were not examined.

Also, this research focused on organizations who had a training department and whose managers made financial decisions about training and who were willing to participate in the study.

This research examined differences based on reports that were classified functionally. The variables that were the same across the reports included the managerial situation, subject matter, time, writer-reader relationship, status of authorship, and degree of formality. The subject matter for all the reports was Emerson training (see reports in Appendix A). The intended audience for all the reports were other managers within the organization. All the reports were examples of short, informational reports. In addition, the physical factors and style of writing were the same for all the reports, except for the report that contained no-evaluation information.

The research did not examine the net benefit that resulted from using each report type. The costs of gathering evaluation information and developing the report vary for each report type. These costs were not addressed in the study.

The subjects in this study were volunteers who determined the budget for a hypothetical situation. An assumption of the study was that the decision process that was used by the volunteers in this hypothetical situation is the same as the process used by decision makers in organizations when they determine training budgets for their departments.

CHAPTER 6

Summary and Discussion

Three research questions were posed in pursuing this study to determine the effect of types of evaluation reports and financial support for the training function by corporate managers. They were:

Research Question #1: What is the relative effect of types of evaluation reports on the financial support given to training by nontraining managers?

Research Question #2: Is there a relationship between the organizational affiliation of the decision maker and the level of financial support?

Research Question #3: What is the deeper logic and behavior used by nontraining managers in making decisions about the level of financial support they will give to training?

Summary

For research question #1, the data showed no significant difference, at the .05 level, in the financial support of the training function by nontraining managers based on the report types of no-evaluation information, informational, examination, and analytical. Therefore, the null hypothesis was accepted.

Data for research question #2 showed that the correlation between organization affiliation and support of the training function by nontraining managers was not significant at the .05 level. Therefore, the null hypothesis for question #2 was accepted.

When the impact of organization affiliation and report type were considered together and related to the level of support for the training function, the effect was found to be significant at the .01 level. This suggests that training managers should realize that the organization and type of report may interact in determining the amount of support from nontraining managers. However, because organization affiliation was a blocking variable, no cause-effect relationship could be established for the interaction effect.

The data for research question #3 revealed that the most frequently cited reason for allocating funds was to support a training program that met a perceived critical need. The most frequently funded program was the FNS retrofitting training.

Most decision makers wanted additional information about the training programs under consideration before making their decisions; however, only one decision maker asked for more evaluation information about the previously conducted training program.

The evaluation report was not a key factor in the allocation decision for most decision makers. Only half of the decision makers even looked at the evaluation report before determining the amounts of their budgets. And, the decision makers who did examine the evaluation reports either did not use the information, used the information to identify what had been wrong with the training program, or did not believe part of the information.

Most decision makers liked the format of the analytical evaluation report. Their comments indicated that they liked knowing what the report was about, the significance of the material, and the recommended follow-up

action. The comments were similar to research findings on the kind of information management wanted in a report summary (Dodge, 1962).

Discussion

This study shows that the relationship between the kind and amount of information contained in evaluation reports and the amount budgeted for the training function may be more complex than originally presumed.

The findings of this research are that while evaluation reports were not key factors in the budget allocation process, there was a relationship between report type, organization affiliation, and the level of financial support. While the results of this research are not generalizable beyond the five organizations that participated in the research and the example contained in the Managerial Situation, the results do have implications for further study.

Additional research should be conducted with a larger number of subjects to identify the specific relationships between the report types, the organization affiliations, and the level of support for the training function.

Two factors that could have affected the results of this study are the position of the writer outside the organization and the previous experiences of the decision makers. Both of these factors should be taken into consideration in future research. The position of the writer is important because there is a relationship between the writer, the reader, and the message. This relationship occurs within the context of a specific situation (Mathes and Stevenson, 1976). Kinneavy (1971) noted that managers read reports within the context of the situation and within the context of the organization's culture.

In this study the task was outside the readers' working context. The design of this research created a somewhat unrealistic context because each decision maker read a report about an unfamiliar situation and was presented a report by a person whose position was actually outside the organization. This study did not consider how well the reports either matched the perceived reality of the readers or extended that reality.

The decision makers' previous experience with evaluation reports could also have affected the findings. Most of the decision makers interviewed had not received any written training evaluation reports in the last year and so were not in the habit of looking in the evaluation reports for information on which to base decisions about future allocations. Future research should examine the decision making process in organizations where training evaluation reports are routinely used to communicate information.

In a more prescriptive vein, the following observations from this study should help to guide practitioners and researchers:

- 1) There was a difference between the process that decision makers say they would like to use in making training decisions and the process they actually used. Decision makers in this study said that they liked having the evaluation information. Yet, only 50 percent of these decision makers actually looked at their evaluation reports before making their decisions.

- 2) The reason cited most frequently by the interviewed decision makers for their funding decisions was a perceived critical need for training. Decision makers did not fund a program unless they thought the program would contribute to their success. The cost of the training was

considered only as it related to the importance of the need and the availability of resources. No decision maker used the information contained in the one-time ex post facto evaluation report to increase the financial support for the training function.

3) The decision makers typically asked for more information about the training programs that they were considering funding. When the requested information was not provided, the decision makers used the available information as the basis for making their allocations.

4) When it came to reporting evaluation of training, no formula applied to all situations. The interviews showed that even within the same organization, decision makers used different criteria in making their budget decisions. Training managers need to analyze the intended audience in their organizations, identify the purpose of the reports, and generate the type of report that will obtain maximum support for the training function.

Conclusion

Training managers should consider the role of reporting evaluation results to management and the connection between evaluation reports and managerial support. Training managers who are not reporting the information that their decision makers perceive as necessary for making the decision may be missing an opportunity to influence their budget allocations, and worse, may be perceived as ineffective. On the other hand, training managers who provide evaluation information that is not used or considered important by the decision makers may be wasting valuable resources and may be perceived as inefficient.

To maximize the influence of the report, the training manager should analyze the audience within the organizational context and identify the purpose of the communication. If the purpose of the report is to inform, the training manager should consider whether to use the no-evaluation information report, the informational report, or the examination report. If the purpose of the report is to persuade, the training manager should consider whether the analytical report will meet the need.

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APPENDIX A

Managerial Situation and Evaluation Reports

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MANAGERIAL SITUATION

Background Information:

You are the manager of a production area for a large manufacturing company. Over the last three years, the company has had profits of \$3.5 million, \$4.1 million, and \$3.8 million. Projections for this year indicate a profit of just under \$3.5 million.

The FNS collating machines in your production area are slated for retrofitting of electronic controls. The corporate training department has estimated that the cost for custom-made training on the new FNS controls will be \$16,500.

This year, your training budget in the production area was \$15,000. You purchased one large custom-made training program (Emerson Operator Training) from the corporate training department at a cost of \$14,920. You have just read the report on this program. It has implications for additional Emerson related training.

You are preparing your budget. The production area that you manage has many needs for next year. At this time, you must decide on the amount of custom-made training that you will purchase from the corporate training department during the next year. The training department has given you information on a process flow course that will be available company wide. The cost per department for that course is \$10,000. The money that you budget for training cannot be used for any other purpose once it is earmarked for training.

Your Decision:

You must determine the amount you will budget to pay for corporate training department custom program(s) or general training program(s) for your production area next year. To aid you in your decision, some dollar amounts are listed below with the kind of training that can be purchased. These amounts are intended only as a guide.

\$10,000	Process flow training
\$14,400	10% less than last year
\$15,000	Same as last year
\$16,500	FNS control training
\$17,250	Additional Emerson training
\$33,750	FNS and additional Emerson training
\$43,750	FNS, Emerson and process flow training

The amount you will budget for training next year: \$ _____

*Please note, if you do not designate an amount, your budget request for training will be entered as zero.

January 24, 1987

TO: Bruce Duple
FROM: John Baber, Corporate Training
RE: Emerson Operator Training

Emerson Operator Training for 61 people has been completed. We were pleased to be of service and look forward to working with you in the future.

cc: James Birt
Brenda Olser
Rob Drew

EFFECTIVENESS EVALUATION REPORT

Program Title: Emerson Operator Training
Program Date(s): 2/20/86
Department: Corporate Training Department
Prepared By: Bruce Baber
Distributed To: Mark Duple, James Birt, Brenda Olser, Rob Drew

1. ORIGINAL EMPLOYEE/ORGANIZATION PERFORMANCE NEED

- Reduce average turn-around time (83 hours).
- Increase first-fix repair rate (68%).

2. EMPLOYEE/ORGANIZATION PERFORMANCE GOAL

- Reduce average turn-around time to 77 hours.

3. APPROVED SOLUTION (TRAINING AND MANAGEMENT COMPONENTS)

● Training - Initial training for 61 Operators of Emerson assembly machines.

● Management - CE-4 insertion tools to be available for all technicians. Implement revised system for part ordering. (Peters Memo 1/86)

4. EFFECTIVENESS OF TRAINING

Rating by trainees:

- Delivery effectiveness 62%
- Quality of information presented 50%
- Usefulness of training to their jobs 90%

Rating by supervisors:

- Overall 70.5%.

Knowledge test:

- Pretest to posttest showed increase of 37.6% for group.

In-training performance test:

- Average trainee score was 90%.

Performance on job:

- Turn-around time of 75 hours [goal 77 hours]
- First-fix rate was not affected by this training.

EFFECTIVENESS EVALUATION REPORT

Program Title: Emerson Operator Training
Program Date(s): 2/20/86
Department: Corporate Training Department
Prepared By: Bruce Baber
Distributed To: Mark Duple, James Birt, Brenda Olser, Rob Drew

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- Average trainee score was 90%.

Performance on job:

- Turn-around time of 75 hours [goal 77 hours]
- First-fix rate was not affected by this training

Cost benefit Analysis:

● Training cost \$14,920 and resulted in value gain of \$93,000 in a 12-month period, a 6 to 1 return on investment. The economic benefit occurred primarily as a result of less equipment damage and less inventory on the floor.

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5. CONCLUSIONS AND RECOMMENDATIONS

● Emerson operator training was effective. We recommend additional training on the subject of locating intermittent problems on the Emersons for 16 lead operators which would increase first-fix repair rate by 2%. The estimated cost of the training is \$17,250, and the estimated value that would be gained from training is \$108,000, a 6 to 1 return on investment.

APPENDIX B

Early Drafts of Managerial Situation and Evaluation Reports

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Scenario

You are the manager of a production area for a large manufacturing company. Over the last three years, the company has had profits of \$3.5 million, \$4.1 million, and \$3.8 million. Projections for this year indicate a profit of just under \$3.5 million.

New FNS machines are slated for your production area next year. The corporate training department has estimated that the cost for custom-made training on the new FNS controls will be \$16,500.

This year, your training budget in the production area was \$15,000. You purchased one large custom-made training program (Emerson Operator Training) from the corporate training department at a cost of \$14,920. You have just read the report on this program. It has implications for additional Emerson related training.

You are preparing your budget. The production area that you manage has many needs for next year. At this time, you must decide on the amount of custom-made training that you will purchase from the corporate training department during the next year. The money that you budget for training cannot be used for any other purpose once it is earmarked for training.

Please circle the amount that you will budget to pay for corporate training department program(s) for your production area next year.*

\$000	\$14,400	\$15,000	\$16,500	\$17,250	\$33,750
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* Please note, if you do not circle an amount, your budget request for training will be entered as \$000.

January 24, 1987

TO: Mark Duple
FROM: John Baber, Corporate Training
RE: Emerson Operator Training

Emerson Operator Training for 61 people has been completed. We were pleased to be of service and look forward to working with you in the future.

cc: James Birt
Brenda Olser
Rob Drew

EFFECTIVENESS EVALUATION REPORT

Program Title: Emerson Operator Training
Program Date(s): 2/20/86
Department: Corporate Training Department
Prepared By: John Baber
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5. RECOMMENDATIONS

Additional training on locating intermittent problems on the Emersons for 16 lead operators would increase first-fix repair rate by 2%. The estimated cost of the training is \$17,250 and the estimated value that would be gained from training is \$108,000 (6:1).

APPENDIX C

Cover Letter to Decision Makers

TO: <Name of the Company> Management Staff

FROM: Cathy Sleezer

RE: Research Study

DATE: March 16, 1987

Thank you for agreeing to participate in a study of budgeting for training programs. The information from this study will be used for my Master's project, which is being supported by the Training and Development Research Center at the University of Minnesota.

Because the sample size for this study is small, your response is important to the success of this project. Individual responses will be kept confidential.

You and the other managers in this study are being asked to review the managerial situation and put yourself in the place of the manager in that situation. After reading the training report, please fill in the blank dollar amount. Use the enclosed envelope to return your response to me by April 3.

Thank you for your help. If you have any questions or concerns, please contact me at 624-7481.

APPENDIX D

Names and Organizations of Experts
Who Validated
the Managerial Situation and Evaluation Reports

VALIDATORS

Training Experts

Bruce Cote
Training Manager
Hutchinson Technology Incorporated

Mitchell Rusy, Jr.
Manager Staff and Organization Development
Group Health Inc.

Brian Murphy
HRD Department

Nontraining Managers

Barry Bridges
Principle Engineer
University of Minnesota

Diane Emerson
Manager Corporate Market Research
HB Fuller

Richard Hendrickson
Treasurer
J. L. Industries

Dan Mount
Director of Sales and Marketing
Animal Fair

Brad Nelson
Superintendent of Plant Engineering
Northern States Power

Lloyd Tarkington
Project Manager
FMC Corporation

Communications Experts

Karne Kay Johnson
Communication Instructor
College of St. Catherine - St. Mary's Campus

Dr. Victoria Mikelonis
Associate Professor in the Rhetoric Department
University of Minnesota

APPENDIX E

Interview Notes

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Notes from Interview A
Organization 1, Examination Report

The decision maker is the Assistant Controller in a health care organization. In analyzing the situation, she first identified the important and unimportant things. The unimportant items in the Managerial Situation included: last year's budget, and the company profits. Last year's budget was unimportant because she didn't know what line items were included. The company's profits mattered only if there had been a big fluctuation from year to year. No such fluctuation seemed to her to exist in this case based on her reading of the information that the previous year's profits were \$3.5 million.

The important item in the managerial situation was the retrofitting training at \$16,500. This was important information because it is a known - the manager would have to train on the machines to keep production up.

Additional information was needed on the Emerson training and the process flow training course in order to really make a budget decision. Additional information was not needed on FNS Control training because it is a given.

The decision maker also identified the useful information in the evaluation report. She learned from the trainee satisfaction figure that training was useful on the job, but the delivery was poor. She determined that while the department could use more training, a better presentation method would need to be identified.

The decision maker determined the amount of her training allocation based on the cost of training Emerson operators. All 61 operators were trained on Emersons. For the future, she would train 7 people and assume the same average cost per person. The decision maker's two reasons for training 7 people were: 1) if there is a smaller group, it is possible that the presentation could be more effective, and 2) supervisors could be trained to present information to their people.

The decision maker took the same approach in budgeting for the Process Flow course. She would train key people and have them train others. She would at least budget for Process Flow and if the training wasn't needed she would transfer the budgeted amount to other training. As a manager she would go to the training.

After she reached her decision she looked at the amount \$21,000 to see if it was in line with previous budget. The increase of 50% led her to check the profit projections to see if she could justify the amount. She determined that she could justify \$21,000 but couldn't justify \$43,000.

The decision maker identified the additional information she needed to make a good decision. She needed to know the level of instruction on the Process Flow Course and why the Emerson operator follow-up training was more expensive than the original training.

The decision maker also identified the assumptions she made in determining the budget. She assumed that the goal would be accomplished by additional training, that her total budget would accommodate the additional costs, that there was staff turnover, which would indicate a need for orientation training and for additional Emerson training.

She liked the format of the analytical report. She assumed that the tools had something to do with the high turn-around time.

She used the cost benefit information, but she assumed that the value gain of \$93,000 didn't include salary costs. She believed that you could obtain benefits based on reduced salary costs or reduced inventory costs. The size of the benefit indicated in this evaluation report meant that it was based on reduced inventory costs.

Discussion

The investigator explained the purpose of the research and showed the other three reports. The decision maker indicated that she liked the analytical report and would find it useful in making her decision. She did not make any recommendations for improving this report. However, she would not increase her budget because of the projected organization budget.

The investigator also verified that the interviewee had budgeted for training in the last year and then asked about the kinds of evaluation information she had received. While the decision maker had budgeted for training in the last year, she had not received any evaluation reports.

Notes from Interview B
Organization 1, Informational Report

The decision maker's work title was Manager of Emergency Care, Urgent Care, Physician Referral and Nurse Line Service. She reviewed the informational report and allocated \$10,000 for the training function.

The decision maker based her decision on the information contained in the evaluation report. Her first observation was that the rating of training was only 50%. She also noted that there is better turn-around time but she questioned what was being turned around. And, she noted, "Quality is important. Training programs that improve the quality of the product should get a higher budget than those that improve the quantity."

She didn't get much "bang for her buck" with the Emerson training so she decided to try something else. She decided to budget for Process Flow training because the remaining programs were linked to Emerson training. She would like more information about the Process Flow training.

Discussion

The investigator explained the purpose of the research and showed the other three reports. The decision maker did not comment on these reports except to note that the most important measurement is performance on the job. She also noted that she believes in training.

The investigator asked the decision maker to consider the format of the analytical report and make suggestions for improvement. The decision maker liked the format of the training report. She noted that it was worthwhile to have objectives, goals, plans of action, and outcomes, and she did not have any suggestions for improving it.

In her job, she has the responsibility for making decisions about training for her staff, but she does have to justify her decisions. She doesn't usually receive training evaluations because her people attend workshops. However, she does want to see on-the-job performance changes as a result of the workshops.

Notes From Interview C
Organization 2, Analytical Report

The decision maker was a Director/Plant manager for a manufacturing organization. He reviewed the analytical report and subsequently allocated \$14,400 to the training function.

The basis for his decision was the decrease in the company's profitability, which meant the budget had to be cut across the board. The information in the evaluation report was not used in making this budget decision.

The decision maker noted that in a high technology industry such as the one he is in, you could never cut out training. But the training is in statistics and engineering. He also noted, "In high technology industries, if you don't train you're dead. In other businesses, it wouldn't hurt the ability to compete if it took longer to get people up to speed. So the manager can afford to take longer to get people up to speed."

Discussion

The investigator explained the purpose of the research and showed the other three reports.

The decision maker stated, "Cost benefit analysis doesn't matter in this case. It doesn't matter how good the training is because the manager is judged tomorrow on the short-term profitability. Long term profitability for the company may be opposite of the short-term rewards." If the company had not had a loss the decision maker stated that he would have analyzed the attached evaluation report.

He reviewed the report as he explained his decision. He commented that the good format helped him get the needed information by scanning. He stated that a report should contain performance need, goal, recommended solution, performance comparison, and cost benefit, and conclusion. He doesn't care about the information in between.

He would budget the \$14,000 with no strings. It would not be designated for a specific purpose.

He had budgeted for training in the last year, but usually he didn't receive any evaluation reports.

Notes from Interview D
Organization 2, Informational Report

The decision maker was a plant manager in a manufacturing company.

He noted that to make a decision he would have to make some assumptions because there was not enough information about the training program that was evaluated.

He also noted that the evaluation report showed that the first-fix rate was not affected. "They addressed the wrong problem, the quality problem should be addressed first." The report shows that they fixed turn-around time rather than first-fix.

He also noted that the evaluation report gave mixed signals. The trainee response to delivery showed that delivery was not effective, and the quality was not affected. So they really need training. However, additional training is not needed on the FNS machines because they are only being retrofitted.

Based on information from the evaluation report, the decision maker decided not to spend more on training than was spent last year. He allocated \$14,400 to the training department in a lump sum. He indicated that he would let the managers determine the program because manufacturing and training should work together to determine the best program.

The investigator asked about the information gained from the Managerial Situation. The decision maker reexamined the managerial situation and noted that lot of training is expensive, but that there was nothing else of significance in the Managerial Situation.

Discussion

The investigator explained the purpose of the research and showed the decision maker the other three reports. The decision maker indicated that, "With cost benefit information the amount budgeted would be changed. It would be doubled because the ROI was six to one."

The decision maker reviewed the analytical report and noted that the recommended training would increase the first-fix rate by 2 percent and reiterated that he would go for the recommended training. The conclusions and recommendations convinced him that his previous decision based on the examination report to double the training budget was the correct decision.

The investigator asked the decision maker about the information in the analytic report. He liked the format of the report and didn't think that any information should be added to or eliminated from it. He noted that generally he liked receiving evaluation information on satisfaction, learning, and performance.

When the investigator asked about the kind of written evaluations he had received about training, he commented that generally he has not received any evaluation reports - but he does talk to the managers.

Notes from Interview E
Organization 3, No-evaluation Information Memo

The decision maker was the Director of Anesthesiology for a medical organization. He reviewed the no-evaluation information report.

The decision maker allocated \$16,500 to the training function. This decision was made without looking at the attached evaluation report. He decided to budget for training on retrofitting the machines because that has to be done if his assumptions are correct. He would have liked more information about the need for the training. He wouldn't be prepared to increase budget by 33%, so he would defer buying the Process Flow Training Course until next year. He noted that money budgeted for training couldn't be transferred, but nothing was said about transferring money budgeted for other things (i.e. supplies) to training. He thought that he might be able to move money from another area so that he could go for the Process Flow Training. He would "float the money," if he could.

He noted the \$16,500 that he budgeted was not that big a jump from his previous budget of \$15,000. He also noted "After investing in machines, it would be foolish not to spend only ten percent more over last year's budget to train people in how to work them."

When the researcher asked him to review the evaluation report, he commented that the no-evaluation information report was not the kind of report that he would like to get. He would like to know the names of the people and their scores on a performance test.

Discussion

The investigator explained the research and showed the decision maker the other three evaluation reports. The decision maker noted that the informational report did not tell what each person did, but it did tell about the group performance. He would still need to know who attended. This report would not affect the amount that he would budget for training.

The decision maker placed particular emphasis on the rating by the supervisor and by the trainees. He felt that because training affected their jobs, they would be in the best position to rate the training. He also noted that in some situations he would be concerned with the 37% increase in knowledge. If training content covers familiar material, that amount of increase in knowledge could indicate that the wrong people had been selected for the job.

When the decision maker reviewed the examination report, he indicated that knowledge of the cost benefit would affect the amount budgeted for training. "If I could show that training would pay back six-fold, I would budget the other \$10,000 for Process Flow training without floating the money." The decision maker inferred that an increase of 6:1 occurred on one training program would mean a 6:1 return on other training programs. He also wondered about the cost of doing cost benefit analysis.

When the decision maker read the analytical report, he noted that a 6:1 return is reasonable. Based on this information he would consider deferring the amount budgeted for the recommendation until the following budget year, unless input from superiors indicates otherwise. The decision maker stated that this option seemed especially likely in light of the net profit decrease and the amount of increase in the training budget.

He then noted that, "You can only train people so much, they need to assimilate the information and they need to do some work.— Not that I don't believe what they [the cost benefit forecasts] are saying." He also stated, "Hospitals work on a 2% to 3% margin and couldn't afford to triple the training/education budget—no matter what the cost benefit analysis showed. The organization simply does not have the money to invest."

The decision maker also commented that while the differences in the kind and amount of information contained in the evaluation reports might not influence the amount of money budgeted for training, it would influence which vendor would be chosen to provide the service.

The decision maker liked the format of the fourth report. He wouldn't change anything about it. The most important pieces of information in the analytical report were the rating by the trainees, the knowledge test and the performance on the job. These pieces of information would be particularly helpful because if the trainees have the same problems next year, he could assume that training and the subsequent evaluation were poor or that the equipment was so complicated that training wouldn't help, and the machine was not worth having.

When asked about the evaluation reports that he had received after his people were trained, he remembered that he had gotten the memo type report and that his employees had gotten certificates.

Notes from Interview F
Organization 3, Analytical Report

The decision maker was the Director of Perinatal Care for a medical organization. She reviewed the analytical report and determined a budget of \$43,750. She did not look at the attached evaluation in making her decision. Instead, she reviewed the Managerial Situation and noted that there had been a drop in profits from last two years and that she is looking at additional training. She wonders if training will affect productivity. She assumed that Process Flow Training would improve the productivity in the department, but she did not know for sure. She didn't have enough information based on the managerial situation to make a decision, but she will go for Process Flow Training. She noted that she must do FNS collating training because if people don't know how to use the machines, they will be ineffective. She repeated that she needed more information. Specifically, she needed values put to the implications of the Managerial Situation. Her gut feeling was to go for the top and try to get all three.

The investigator asked the decision maker to look at the attached evaluation and comment on the information contained in it. When she reviewed the evaluation, the decision maker noted that it confirmed her original decision. As a manager she said she believed in taking a risk. She takes a risk and then proves it. She said, "Cost benefit shows that the amount returned would cover the amount budgeted. With a little time, I could determine the cost benefit of other courses offered and that they would save even more."

The decision maker also noted that decisions to fund training programs that impact productivity could affect the company's profits because most administrative projections don't take into account training changes. So there is a chance to increase the profit.

When asked to comment about the format in the analytical report, the decision maker indicated that it was satisfactory. However, she didn't know the implications of some of the percents in the effectiveness evaluation section. For example, she didn't know the kind of questions asked in determining delivery effectiveness or the tools used. To improve the report she would include this information.

She stated that she liked the inclusion of the need, goal, solution, and follow-up format.

She doesn't put as much faith on the supervisor rating because she is not sure that managers have the skills to know what to look for in rating their employees.

She reread the Managerial Situation and noted that the directions to read the second page were not clear.

Discussion

The investigator explained the purpose of the research and showed the decision maker the other three reports. The decision maker liked the analytical report best and indicated that it would be nice to receive that kind of evaluation report.

Notes from Interview G
Organization 4, Analytical Report

The decision maker's title was Vice President of Cash Management Sales. She reviewed the analytical report and allocated \$16,500 to the training function.

The decision maker perceived that she had three training choices - FNS training, Process Flow training, and Emerson training. She indicated that she did not have sufficient information to make a sound decision. She had assumed that because company profits were down, budgets would be tight. She had also made an assumption that the corporate goal was to decrease costs rather than to increase productivity. And she noted that the corporate goal will affect the manager's objectives. The decision maker had some concern because she felt that this was significant information to be missing.

The decision maker determined that she would budget for the FNS control training at \$16,500 because "she has to have this training—it is essential." Her people would need this training to work the new machines. She didn't know if they absolutely needed the Emerson training. She didn't know what the Process Flow training was and if it is necessary. She stated that she needed more information about these two training courses. The decision maker recognized that she separated training that is critical from the training that is nice to have.

Also, the decision maker decided that she couldn't budget more than \$16,500 because of the budget constraints that would occur as a result of the organization's profits. She reviewed her previous budget and noted that she was already budgeting considerably more than she had budgeted last year.

The decision maker had some concerns with the evaluation report. The focus of her concerns was the cost benefit data and the credibility of the person who had conducted the evaluation. She absolutely believed that some training such as management training has value that can't be quantified and that only training targeted to improve efficiency can be evaluated using cost benefit analysis. She asserted that cost benefit evaluation could not be done in her environment. And she stated, "In fact, I would laugh at training if they did a cost benefit analysis."

She noted that her bosses had begun to ask for the kind of quantitative information contained in the evaluation report but that so far they hadn't asked for quantitative numbers on training. She noted that in her world some things can't be measured that well, and she would be very skeptical of anyone who claimed to have measured those things. Two examples of hard-to-measure items are the results of management development and new-product training. New-product training can't be measured because the products are changing all the time and so it would be difficult to know the value. The value would be in keeping current. Also it is difficult to measure because there are so many factors intertwined in success - it would be hard to determine the value of one factor. However, she noted that she does accept soft evaluations of these kinds of things (i.e., the finger in the wind test). Another concern with evaluations is the bias that occurs when training is responsible for evaluating its own programs - especially when talking ROI and cost benefit analysis are used.

Discussion

The investigator explained the purpose of the research and shared the other three reports.

The decision maker noted that the kind of evaluation situation presented in this research is only necessary if there are lots of training choices, or lots of choices between training and nontraining options. If the internal training is rotten but the manager politically is expected to use the training, then the evaluation is unnecessary. Also, if the training is necessary and it is only offered internally, then evaluation is unnecessary. If there is no choice, then the better option for the training department would be to keep the quality high, rather than spending time to evaluate to justify the training programs.

She thought that the format of the analytical evaluation was good. If she got back satisfaction information, only negative feedback would have an impact. After thought, she decided that maybe positive feedback would also have an impact. She thought the report could be improved by eliminating cost benefit information.

She noted that all of her staff have received training outside the department in the last year. Her budget for training comes from two sources—the training budget and the travel and entertainment budget. She could combine both of those budgets but she would lose some flexibility if she did that. Also, some training is paid for with hard dollars and some is paid for with soft dollars. She implied different expectations for the programs paid for with soft and hard dollars, but didn't talk about it explicitly. She rarely gets any evaluation information from the training programs, although sometimes she gets some happy sheet scores from individuals.

In determining the training need for her department, she has tried to look at training on an individual basis and focus on what the individuals need to know and then she identifies the options for getting the training.

She stated that she usually can't hire the skills she needs because only one other institution in the area is doing the same kind of work; so she has to build the skills she needs. Sometimes she pays to have people tutored, sometimes she sends them to general courses offered through the company, and sometimes she buys the training from vendors. Often she buys training programs even when they are bad because she needs the course.

Notes from Interview H
Organization 4, No-evaluation Information Memo

The decision maker was a Consumer Market Manager responsible for the operation of six banks. The decision maker reviewed the report that contained no-evaluation information.

He thought that there was insufficient information in the Managerial Situation to make a good decision. He reviewed the managerial situation and report and noted that 1) earnings are in a downward trend for the company, 2) he doesn't know his area's contribution to the company, 3) he doesn't know if training is important to the organization, 4) he doesn't know how different the retrofitting process is from what it used to be. This information would let him know if training in this area was significant or if he could just limp along, 5) he didn't know if he could structure retrofit training to overlap with Emerson training. He wondered if the programs could be put together for \$20,000 to get more benefit?, 6) he didn't know if the cost per operator was reasonable. He wondered if the trainees would be in training for one day or one week, 7) he saw no implications in the evaluation report for further Emerson training, and 8) he didn't know what Process Flow was.

His philosophical thoughts on training are that because the earnings are down, it doesn't mean that training should be cut. When the organization is in that situation, training is not a cost, but an investment. He believed that the manager in the Managerial Situation should budget for investment training. He also believed in the need to have a coordinated approach to training, an ongoing theme, rather than a disjointed putting-out-fires approach.

Because \$15,000 represents a lot of resources it makes sense to keep going on Emerson training. He didn't want to budget for \$34,000 with no knowledge of output. He wondered if it was possible to deliver retrofit training at the same time the machines were retrofitted. He would like to have a combined program with last year's Emerson training. He didn't know the percent of his budget that \$15,000 represented. It could be "a spit in the bucket," in which case he could budget for all three programs. But if it isn't imperative to have additional training, then he would drop the program.

He decided to budget \$25,000 to training and to coordinate retrofitting and Emerson training. If there were enough budget left over, he would have Process Flow Training.

The investigator explained the purpose of the research and showed the subject the other three reports. The decision maker noted that the informational report showed that the goal was accomplished. It doesn't provide any information about whether the programs could be tied together. He wouldn't increase the budget based on this evaluation report since it is based on the past and he doesn't know the impact of the current programs on the bottom line. The examination report would strengthen his resolve to combine the programs. This report gives the manager a better feel for a custom program. He would spend \$9,000 extra for collating and Emerson training because he had already gotten a full return on his investment. He analyzed that if there is this kind of payback, then not-training at 100% could result in a substantial loss. The information in the analytical report verified his decision to budget for Emerson

training, but the report doesn't say anything about the collating machines. This report suggests the he is a good-sized player in the organization because a 2% increase is substantial. The ROI of 6:1 is good. He would stay at \$33,750. He doesn't know what Process Flow is. He would have to increase the budget 100%. It would be hard to justify taking everything because it would increase his budget to 150% of what it had previously been. But he would note the mood of the organization. It might be possible that he would ask for four programs, knowing that he would get the three he wanted.

When asked about the format of the analytical report, he noted that the training appears to be well done. He would take trainee satisfaction with a grain of salt, but wouldn't base any decision on it. Supervisors are more objective. The real measure is a change in behavior on the job. With this report, he would have to assume that the change continued - "it wasn't a shot in the dark."

The format of the last report is good for an internal document. It is not narrative, but bullet form, it is one page, and the information is pertinent. The report is not sufficient for a report to the board. He would not change anything about it.

The investigator verified that he had budgeted for training in the last year and asked about the written evaluations he had received. He recalled that he had received some formal evaluation that had knowledge tests with pre and posttest scores. He had also received satisfaction scores.

Notes from Interview I
Organization 5, No-evaluation Information Memo

The decision maker's title was Manager of Customer Services in Sales and Support. The decision maker reviewed the no-evaluation information report. She noted that she did not really have enough information to make a good decision. For example, she didn't really know what was involved with the Process Flow course.

The decision maker budgeted \$33,750 for FNS and Emerson training. The evaluation report had no effect on the budget decision because the report was not looked at before the allocation was made. The decision maker based her decision on company profits and on the cost to invest in training on the new controls. She noted that company profits are not changing a whole lot. She also stated that FNS is equipment in the production area. Because the equipment changed, training is obviously needed on that equipment so the organization can stay profitable.

She would budget for additional Emerson training because it is in the production area and it has to do with operator training. Her logic was that any amount of training in the production area is needed. Process Flow training was not linked to the production area in the Managerial Situation so she did not budget for it.

She then indicated that if she had success in Emerson training, she would tie in additional Emerson training for cohesiveness. She believes that it is better to tie training programs together than to jump all over.

The investigator asked the decision maker about her perception of the evaluation report. The decision maker related that it was nice to know that her people had completed the training, but she would know that information anyway.

Discussion

The investigator explained the purpose of the research and showed the other types of reports. The decision maker liked the additional information presented in the analytical report. She would make the assumption that if they were effective once, they would likely be effective again. The training department's track record would be proven. She also thought that recommendations for the future would be great. The decision maker noted that evaluation should quantify the goal originally agreed to. The report should include quantifiable data. Especially since it was a sizeable investment. As a manager it is important for her to know that she and the trainer are on the same wavelength regarding the success of training. She believes that it is important for the manager of an area to stay focused to assure that the department goal is accomplished. She would not budget for training and give the training department all the responsibility for staying on task. She felt that would be especially true in this situation because the resources are sizeable.

In discussing the format of an evaluation report, she expressed the belief that the one-page limit and the effectiveness information are critical for evaluation reports. She would not change anything about the evaluation report.

When asked about the written evaluations she has received, she noted that she had not received any, but she did check with her people to see what they had learned.

Notes from Interview J
Organization 5, Examination Report

The decision maker's title was Production Manager. She reviewed the examination report.

She read the Managerial Situation twice and budgeted \$17,250 for the training function. She budgeted for the FNS training plus additional miscellaneous training. The FNS training is a must-do program because production must be kept up. The evaluation report did not affect her allocation because she did not look at it before making her decision. She was not interested in \$10,000 process flow training. She also was not willing to budget much higher than last year because of company profits. She is not convinced that Process Flow will affect the bottom-line. She would need more information to make that decision. She noted that by not adding the cost of unnecessary training she could help the bottom-line.

She also noted that managers evaluate before the fact and not after the fact. After the fact evaluation would not impact future decisions unless the programs were going to be duplicated. She believes that evaluation is useful only for on-going training and repeat training.

She stated that, "Cost benefit evaluation for a program should not affect future decisions because each training situation must be evaluated on its own merit. Payback on one program may not mean payback on another." And she continued, "Cost benefit is only an estimate. It can be fudged enough to make the payback look great. We do it with equipment and it can be done with training. Cost benefit doesn't stand alone."

She also stated that, "Sometimes it seems that training is trying to justify their existence rather than justifying the need for training and the effectiveness of training. It is unfortunate."

The investigator explained the purpose of the research and described the other three reports. The investigator asked the decision maker about her perceptions of the format of the Analytical Report. The decision maker found the format to be acceptable, but it could be improved by removing the cost benefit evaluation.

The investigator asked the decision maker if she had received any written training reports in the last year and the decision maker couldn't remember receiving any.